

METHOD AND APPARATUS FOR COMPENSATING FOR MOTION PREDICTION

ABSTRACT OF THE DISCLOSURE

A process burden for code processing is reduced by the
5 present system and method while possibly avoiding the lowering
of image quality. When compensating for motion prediction by
using a multi-reference frame while sequentially changing the
pixel-based sizes of motion compensating blocks, a size-reduced
block is generated depending upon a motion compensating block
10 having the greatest pixel-based size to be taken as the uppermost
layer among the pixel-based sizes. Thereafter, motion vector
search ranges are determined respectively within the reference
frame images, on the basis of a plurality of size-reduced
reference images reduced in size respectively corresponding to
15 the size-reduction ratios of the size-reduced blocks and the
size-reduced blocks. Using the determined search range, an
optimal motion vector is detected while sequentially changing
the pixel-based sizes of the motion compensating blocks. This
can detect a motion vector by only a limited search range within
20 the reference frame image.